

# Notice of Allowability

Application No.

10/693,658

Examiner

Alford W. Kindred

Applicant(s)

MADHAVARAPU ET AL.

Art Unit

2163

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed 11/14/06.
2. ☒ The allowed claim(s) is/are 1-34, 52, and 58-60, renumbered as 1-38.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
ALFORD KINDRED  
PRIMARY EXAMINER

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Paul W. Mitchell on 1/17/07.

The application has been amended as follows:

-- **Delete Claim 61.**

-- **In claim 19**, before "." and after "claim" --delete --"12"-- and replace with --  
"13"--.

-- **Delete claims 1-11** and replace with --"1. (Currently amended) A computing  
system comprising:

a redirector residing on a local device operable to receive a request to perform a file operation on a file residing on a remote device that is coupled to the local device, and to look up a transaction from the request;

a transaction manager to marshal the transaction effective to allow the redirector to send the marshalled transaction and the requested file operation to the remote device to retrieve a file operation result that was otherwise unavailable on the local device.

2. (Currently amended) A computing system according to Claim 1, wherein the transaction manager is not integrated into a file system.

3. (Currently amended) A computing system according to Claim 1, wherein the redirector is operable to receive the file operation result including file information from the remote device that includes a file system identifier (Fid) and a version identifier associated with the file.

4. (Currently amended) A computing system according to Claim 3, wherein the redirector is operable to selectively create a file control block (FCB)

Art Unit: 2163

associated with the file, the FCB including the Fid and version identifier information associated with the file.

5. (Currently amended) A computing system according to Claim 4, wherein the redirector is operable to determine whether an existing FCB can be used for the request.

6. (Currently amended) A computing system according to Claim 5, wherein the redirector is operable to determine whether an existing FCB that is associated with an uncommitted transaction can be used for the request.

7. (Currently amended) A computing system according to Claim 5, wherein the redirector, in determining whether an existing FCB can be used for the request, is operable to compare a pathname and transaction context for the request with a pathname associated with the existing FCB.

8. (Currently amended) A computing system according to Claim 1, wherein the transaction manager is a kernel level transaction manager.

9. (Currently amended) A computing system according to Claim 1, wherein the redirector is operable to selectively indicate in the request that the remote device should signal the local machine responsive to a file operation being performed on the file that was not requested by the redirector.

10. (Currently amended) A computing system according to Claim 1, wherein the redirector sends the transaction with request using a protocol based on a server message block (SMB) protocol.

11. (Currently amended) A computing system according to Claim 10, wherein the protocol supports non-transacted remote file operations."—

**--Delete claims 13-18 and replace with --"13. (Currently amended) A computing system comprising:**

a server component (SRV) resident on a local device and operable to receive a request from a remote device via a network coupling, the request being for a transacted file operation on a file residing in the local device;

a transaction manager resident at the local device and operable to communicate transaction messages relating to the transacted file operation to the remote device; and

a file system resident at the local device and operable to perform the requested transacted file operation on the file responsive to the SRV component and transaction manager effective to generate a transacted file operation result on behalf of the remote device.

14. (Currently amended) A computing system according to Claim 13, wherein the SRV component provides a file system identifier (Fid) and a version identifier associated with the file to the remote device.

15. (Currently amended) A computing system according to Claim 13, wherein the transaction manager is a kernel level transaction manager.

16. (Currently amended) A computing system according to Claim 13, wherein the file system is operable to selectively cause the SRV component to signal

Art Unit: 2163

the remote device responsive to a file operation being performed on the file that was not requested by the remote device.

17. (Currently amended) A computing system according to Claim 13, wherein the SRV component sends the transaction with the request using a protocol based on a server message block (SMB) protocol.

18. (Currently amended) A computing system according to Claim 17, wherein the protocol supports non-transacted remote file operations.”—

**--Delete claims 20-29 and replace with --“20. (Currently amended) A computer implemented method comprising:  
receiving a request for a file operation;**

determining whether a corresponding file resides on a local device or a remote device that is coupled to the local device; retrieving a transaction for the operation; marshalling the transaction; in an instance, where the file resides on the remote device, sending the marshalled transaction with the request to the remote device over a network; and receiving from the remote device information resulting from the file operation that was otherwise unavailable to the local device.

21. (Currently amended) A computer implemented method according to Claim 20, wherein the information received from the remote device includes a file identifier (Fid) and a version identifier.

22. (Currently amended) A computer implemented method according to Claim 21, wherein receiving a request for a transacted file operation further comprises: providing a name for the request if the request is for a file operation on the remote device; and selectively creating a file control block (FCB) associated with the file, the FCB including the Fid and version identifier information associated with the file.

23. (Currently amended) A computer implemented method according to Claim 22, wherein selectively creating a FCB further comprises determining whether an existing FCB can be used for the request.

24. (Currently amended) A computer implemented method according to Claim 23, wherein determining whether an existing FCB can be used for the request further comprises determining whether the existing FCB is associated with an uncommitted transaction.

25. (Currently amended) A computer implemented method according to Claim 23, wherein determining whether an existing FCB can be used for the request, further comprises comparing a pathname and transaction context for the request with a pathname associated with the existing FCB.

26. (Currently amended) A computer implemented method according to Claim 20, wherein the method is performed in a kernel mode.

27. (Currently amended) A computer implemented method according to Claim 20, further comprising selectively indicating in the request that the remote device should signal the local device in response to a file operation being performed on the file that was requested by a device other than the local device.

Art Unit: 2163

28. (Currently amended) A computer implemented method according to Claim 20, wherein the transaction is sent with the request using a protocol based on a server message block (SMB) protocol.

29. (Currently amended) A computer implemented method according to Claim 28, wherein the protocol supports non-transacted remote file operations.”—

--Delete claim 52 and replace with --“52. (Currently amended) A computer implemented method comprising:

receiving a pre-prepare notification from a transaction manager residing in a first computing platform;

providing file operation data from the first computing platform to a second computing platform; receiving a prepare notification from the transaction manager residing in the first computing platform; and providing a message to the second computing platform containing the prepare notification via the network effective to allow transacted file information to be obtained on behalf of the first computing platform.”—

--Delete claims 58-60 and replace with --“58. (Currently amended) A computer implemented method comprising:

receiving a pre-prepare notification associated with a transaction from a first computing platform at a second computing platform; providing the pre-prepare notification to a transaction manager residing in the second computer platform;

receiving file operation data associated with the transaction from the first computing platform at the second computing platform; providing the file operation data to a file system residing in the second computing platform; receiving a prepare notification from the first computing platform; and providing the prepare notification to the transaction manager residing in the second computing platform effective to allow transacted file information to be obtained on behalf of the first computing platform.

59. (Currently amended) The computer implemented method of claim 58 wherein the prepare notification causes the second computing platform to store the file operation data in a manner that allows the file operation data to be either committed or rolled-back.

60.. (Currently amended) The computer implemented method of claim 58 wherein the pre-prepare notification causes the second computing platform to flush any caches of the second computing platform associated with the transaction.

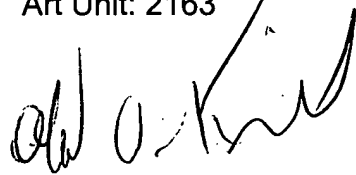
Art Unit: 2163

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alford W. Kindred whose telephone number is 571-272-4037. The examiner can normally be reached on Mon-Fri 9:00 am- 5:00 pm.
6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/693,658

Page 7

Art Unit: 2163

A handwritten signature in black ink, appearing to read 'Alford W. Kindred', written in a cursive style.

Alford W. Kindred  
Patent Examiner  
Tech Ctr. 2100